



Water-Data Report 2008

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°45'54", long 74°31'47" referenced to North American Datum of 1983, Harding Township, Morris County, NJ, Hydrologic Unit 02030103, at bridge on Camp Trail Road in Morristown National Historical Park, 20 ft downstream of unnamed tributary, 500 ft west of Mount Kemble, and 2.4 mi northeast of Bernardsville.

DRAINAGE AREA.--1.07 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Date	Discharge, in ft ³ /s
Dec 3, 2007	1.55
Feb 26, 2008	2.56
Feb 27, 2008	2.83
Jun 10, 2008	1.36
Aug 19, 2008	0.43

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Cooperative Network Site Descriptor: Background and Low-Level Mercury Assessment special study site, NJ Department of Environmental Protection Watershed Management Area 6. The samples on Nov 21 and Mar 18 were for the Low-Level Mercury Assessment special study.

COOPERATION.--Physical measurements and samples for laboratory analysis on Nov 21 and Mar 18 were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Turbdty	UV	UV	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
			Instan- taneous dis- charge, ft ³ /s (00061)	Tur- bidity light, det ang 90+/-30 corctd	UV absorb- ance, 254 nm, wat flt units			
Nov 21...	1040	QC - Artificial, field blank	--	--	--	--	--	--
Nov 21...	1100	Surface water, regular	--	.6	--	--	752	10.5
Dec 03...	1100	Surface water, regular	1.6	1.4	.119	.093	736	11.5
Feb 27...	1125	Surface water, regular	2.8	1.0	.038	.028	734	12.6
Mar 18...	1045	QC - Artificial, field blank	--	--	--	--	--	--
Mar 18...	1115	Surface water, regular	--	.8	--	--	760	12.0
Jun 10...	1130	Surface water, regular	1.4	3.2	.051	.040	746	9.2
Aug 19...	1101	QC - Artificial, field blank	--	--	--	--	--	--
Aug 19...	1130	Surface water, regular	.43	3.7	.043	.033	749	9.2
								99

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specif-										ANC,			
	pH, water, unfltrd field, std units (00400)	conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (25 degC)	Temper- ature, water, deg C (00020)	Hard- ness, water, mg/L as CaCO3 (00900)	Calciu- m, water, filtrd, mg/L (00915)	Magnes- ium, water, filtrd, mg/L (00925)	Potas- sium, water, filtrd, mg/L (00935)	Sodium, water, filtrd, mg/L (00930)	fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L as SiO2 (00955)	
Nov														
21...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	7.2	122	12.8	7.4	--	--	--	--	--	--	--	--	--	--
Dec														
03...	7.5	113	6.0	4.8	36	8.99	3.31	.93	6.79	30	7.58	E.09	19.9	
Feb														
27...	7.2	92	2.5	5.5	33	8.29	2.91	.62	4.51	25	3.96	<.12	20.9	
Mar														
18...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	7.7	101	6.0	5.8	--	--	--	--	--	--	--	--	--	--
Jun														
10...	7.4	125	30.5	17.9	43	11.0	3.81	.81	5.75	37	5.53	E.08	26.1	
Aug														
19...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	7.9	144	26.0	18.4	50	12.8	4.34	.84	6.04	44	5.61	E.09	27.5	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Residue water, filtrd, mg/L (00945)		Residue on sum of consti- tuents wat flt (70301)		Residue at 180degC total non- filter- able, mg/L (70300)		Ammonia + org-N, water, filtrd, mg/L as N (00623)		Ammonia water, filtrd, mg/L as N (00608)		Nitrate + nitrite water, filtrd, mg/L as N (00631)		Partic- ulate nitro- gen, susp, water, mg/L (49570)		Total nitro- gen, water, filtrd, mg/L unfltrd (00602)	Total nitro- gen, water, filtrd, mg/L as P (00600)	Ortho- phosphate, water, filtrd, mg/L as P (00671)	Phos- phorus, water, filtrd, mg/L as P (00666)	Phos- phorus, water, unfltrd, mg/L as P (00665)
Nov																			
21...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
21...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Dec																			
03...	12.0	E78	82	3	.20	.029	.13	E.04	.33	E.36	E.006	E.006	.013						
Feb																			
27...	13.4	E71	78	5	E.09	E.007	.33	<.04	E.41	--	E.008	E.005	E.008						
Mar																			
18...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
18...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Jun																			
10...	13.5	E90	108	6	E.07	<.010	.33	E.03	E.40	E.43	.014	.012	.020						
Aug																			
19...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
19...	13.7	E99	110	3	<.14	E.008	.33	.04	--	--	.036	.015	.023						

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic water, filtrd, µg/L (00681)	Arsenic water, filtrd, µg/L (01000)	Arsenic water, unfltrd, µg/L (01002)	Barium, water, recover-able, µg/L (01007)	Beryllium, water, recover-able, µg/L (01012)	Boron, water, filtrd, µg/L (01020)	Boron, water, recover-able, µg/L (01022)	Cadmium water, unfltrd, µg/L (01027)	Chromium, water, recover-able, µg/L (01034)	Copper, water, filtrd, µg/L (01040)
Nov													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec													
03...	.5	<.04	.5	3.4	--	--	--	--	9.3	--	--	--	--
Feb													
27...	.2	<.04	.2	1.6	.39	<.60	10.0	<.04	6.8	E5	E.01	E.30	--
Mar													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun													
10...	.6	<.04	.6	1.7	--	--	--	--	8.3	--	--	--	--
Aug													
19...	--	--	--	--	<.06	--	--	--	--	--	--	--	<1.0
19...	.6	<.04	.6	1.2	.36	E.44	11.6	<.04	9.1	E6	<.01	E.20	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 6

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, filtrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Manganese, water, unfltrd recover-able, µg/L (01055)	Mercury, water, filtrd, µg/L (71890)	Mercury, water, unfltrd recover-low level ng/L (50286)	Mercury, water, unfltrd recover-able, µg/L (71900)	Nickel, water, filtrd, µg/L (01065)	Nickel, water, unfltrd recover-able, µg/L (01067)	Selenium, water, unfltrd recover-able, µg/L (01147)	Silver, water, unfltrd recover-able, µg/L (01077)	Zinc, water, filtrd, µg/L (01090)
Nov													
21...	--	--	--	--	--	--	.13	--	--	--	--	--	--
21...	--	--	--	--	--	--	.73	--	--	--	--	--	--
Dec													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb													
27...	<1.2	77	--	.17	4.2	--	--	<.010	--	.37	.09	<.02	--
Mar													
18...	--	--	--	--	--	--	.04	--	--	--	--	--	--
18...	--	--	--	--	--	--	.87	--	--	--	--	--	--
Jun													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug													
19...	--	--	<.08	--	--	<.010	--	--	<.20	--	--	--	<1.8
19...	<1.2	206	--	.28	13.8	--	--	<.010	--	.34	.11	<.02	--

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 6 of 6

[QC, quality control sample. Remark codes: <, less than;
 E, estimated.]

Date	Zinc, water, unfiltrd recover -able, μg/L (01092)	Methyl- mercury water, unfiltrd low level ng/L (50284)
Nov		
21...	--	<.04
21...	--	<.04
Dec		
03...	--	--
Feb		
27...	E1.5	--
Mar		
18...	--	<.04
18...	--	<.04
Jun		
10...	--	--
Aug		
19...	--	--
19...	E1.1	--